



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,049	11/07/2001	William E. Mazzara	GP-301610	1827

7590 05/23/2005

General Motors Corporation
Legal Staff, Mail Code 482-C23-B21
300 Renaissance Center
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

CAI, WAYNE HUU

ART UNIT	PAPER NUMBER
----------	--------------

2681

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,049

Applicant(s)

MAZZARA ET AL.

Examiner

Wayne Cai

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02/03/2005 have been fully considered but they are not persuasive.

The Applicants argue that King fails to teach "request communication", but rather "forwarding a linking request". The Examiner respectfully disagrees to the arguments because even though King teaches that the inter-device linking server forwards the request; however, this request is from one of the primary communication device and the secondary communication device and the inter-device is acting as the middle agent to make a linking request for communications. Therefore, it reads on the claimed limitation.

In reference to claims 4 and 19, the Applicants argue that Khullar does not teach or suggest that "the battery life viability is based on a power state and a power life.", and the Applicants allegedly states that no support can be found at column 4, lines 1-4. The Examiner respectfully disagrees because Khullar teaches that "a low battery condition is detected, and a determination is made." (col. 4, lines 1-4). It is clear that the battery life is not sufficient based on the current state of the battery.

Furthermore, Khullar also teaches "determining a calibrated threshold for the battery life viability" because once the battery is detected that it is in a low condition means that the battery is calibrated and it falls below a threshold; therefore, automatic selection of an AT is enabled. Also, it is obvious that if Khullar teaches "determining a

Art Unit: 2681

calibrated threshold for the battery life viability”, the threshold determination is made regardless whether it is exceeded or not. If the threshold were exceeded, there would be no low battery indication (col. 4, lines 1-3).

The Examiner again disagrees to the arguments when Applicants states that Khullar fails to teach “determining a calibrated threshold for the received signal strength”, and “determining the received signal strength indication if the calibrated threshold is exceeded” because Khullar does describes these features. Khullar teaches determining the minimum RPL (fig. 2, box 210) in which it means that Khullar teaches determining a calibrated threshold for the received signal strength. Khullar further discloses that once the RPL is determined, the optimal AT is determined at box 212 and selected at boxes 216 and 218. It is equivalently interpreted as determining the received signal strength indication if the calibrated threshold is exceeded because the received signal is exceeded the threshold; therefore, one AT is selected.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 10-11, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by King (US 2003/0055867 A1).

Regarding claims 1, 10, and 16, King discloses a method, system, and computer usable medium for providing multi-path communication for a mobile vehicle comprising:

- receiving a service request (paragraph 0040, and figure 4);
- determining availability of at least one primary communication device and at least one secondary communication device in response to the service request (paragraph 0041, lines 1-8, and figure 4);
- determining capability of the primary communication device and the secondary communication device (paragraph 0041, lines 1-8, and figure 4);
- requesting communication from one of the primary communication device and the secondary communication device based on the capability determination (paragraph 0041, lines 8-12, and figure 4).

Regarding claims 2, 11, and 17, King discloses the method, system, and computer usable medium of claims 1, 10, and 16 as described above. King further discloses an initiating a service request from one of the primary communication device and the secondary communication device (paragraph 0041).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2681

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-9, 12-15, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 2003/0055867 A1) in view of Khullar (US 6,748,246 B1).

Regarding claims 3, and 18, King discloses the method, and computer usable medium of claims 1, and 16 as described above. King, however, fails to disclose the capability determination is based on factors selected from the group consisting of battery life viability, relative signal strength indication, service availability, type of service and call state.

In a similar field of endeavor, Khullar discloses an apparatus for selecting an access technology. Khullar further discloses, wherein the capability determination is based on factors selected from the group consisting of battery life viability (column 4, lines 3-5), relative signal strength indication (column 4, lines 32-45), service availability (column 4, lines 17-22), type of service and call state (column 4, lines 22-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the capability determination based on the selected factors to make the communication more reliable and more efficient.

Regarding claims 4, and 19, King discloses the method, and computer usable medium of claims 3, and 18 as described above. Khullar further discloses, wherein the battery life viability is based on a power state and a power life (column 4, lines 1-4).

Regarding claims 5, 12, and 20, King discloses the method, system, and computer usable medium of claims 3, 10, and 18 as described above. Khullar further

Art Unit: 2681

discloses: determining a calibrated threshold for the battery life viability (column 4, lines 1-4).

Regarding claims 6, 13, and 21. King discloses the method, system, and computer usable medium of claims 5, 12, and 20 as described above. Khullar further discloses: determining the battery life viability if the calibrated threshold is exceeded (column 4, lines 3-4, and column 6, lines 11-32).

Regarding claims 7, 14, and 22. King discloses the method, system, and computer usable medium of claims 3, 10, and 18 as described above. Khullar further discloses: determining a calibrated threshold for the received signal strength indication (column 4, lines 32-45).

Regarding claims 8, 15, and 23. King discloses the method, system, and computer usable medium of claims 7, 14, and 22 as described above. Khullar further discloses: determining the received signal strength indication if the calibrated threshold is exceeded (column 4, lines 32-45).

Regarding claims 9, and 24. King discloses the method, and computer usable medium of claims 3 and 18 as described above. Khullar further discloses, wherein the type of service is analog communication, digital communication, satellite communication, and global system for mobile communication (see figure 1).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798. The examiner can normally be reached on Monday-Friday; 9:00-6:00; alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wayne Cai
Examiner
Art Unit 2681



ERIKA A. GARY
PRIMARY EXAMINER